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Washington, D.C. 20231

August 28, 2002

By Michelle Chan
Michelle Chan

PATENT
100/12710
SEP 4 - 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

GARY L. SHUCK

Application No.: 10/092,011

Filed: March 5, 2002

For: PROCESS FOR FILLING
MICROFLUIDIC CHANNELS

Examiner: Unknown

Art Unit: 1743

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR § 1.97
AND 1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on the attached form PTO-1449 are being called to the attention of the Examiner. A copy of each reference is enclosed.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is made that a search has been conducted or that this statement encompasses all possible relevant information.

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Serial No. 10/092,011
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Applicants believe that no fee is required for submission of this statement, since it is being submitted within three months of the filing date or prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to charge such fee to Deposit Account No. 03-0177. Please charge any additional fees or credit any overpayment to the above-noted deposit account.

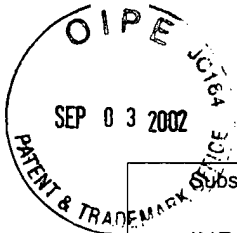
Respectfully submitted,



Andrew L. Filler
Reg. No. 44,107

CALIPER TECHNOLOGIES CORP.
605 Fairchild Drive
Mountain View, CA 94043
Ph: (650) 623-0700
Fax: (650) 623-0500

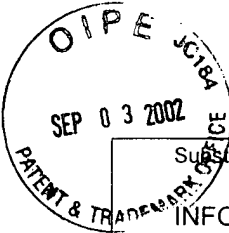
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Substitute for form 1449A-B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Complete if Known	
	Application Number	10/092,011
	Filing Date	March 5, 2002
	First Named Inventor	Shuck
	Group Art Unit	
	Examiner Name	
	Attorney Docket Number	100/12710

U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
		Number	Kind Code (if known)			
	AA	4,390,403		Batchelder	06-28-1983	
	AB	4,908,112		Pace	03-13-1990	
	AC	5,126,022		Soane et al.	06-30-1992	
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	AF	5,585,069		Zanzucchi et al.	12-17-1996	
	AG	5,593,838		Zanzucchi et al.	01-14-1997	
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	AO	5,800,690		Chow et al.	09-01-1998	
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	BA	5,958,694		Nikiforov	09-28-1999	
Examiner Signature					Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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	BQ	6,280,589		Manz et al.	08-28-2001	

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Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				
	BR	WO	9604547		Lockheed Martin	02-15-1996		
	BS	WO	9702357		Affymetrix, Inc.	01-23-1997		
	BT	WO	9845481		Caliper	10-15-1998		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	BU	DASGUPTA, P.K. et al., "Electroosmosis: A Reliable Fluid Propulsion System for Flow Injection Analysis," <u>Anal. Chem.</u> (1994) 66:1792-1798	
	BV	EFFENHAUSER, C.S. et al., "Glass Chips for High-Speed Capillary Electrophoresis Separations with Submicrometer Plate Heights," <u>Anal. Chem.</u> (1993) 65: 2637-2642	

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	BW	EFFENHAUSER, C.S. et al., "High Speed Separation of Anitsense Oligonucleotides on a Micromachined Capillary Electrophoresis Device," <u>Anal. Chem.</u> (1994) 66: 2949-2953	
	BX	EFFENHAUSER, C.S. et al., "Integrated Capillary Electrophoresis on Flexible Silicone Microdevices: Analysis of DNA Restriction Fragments and Detection of Single DNA Molecules on Microchips," <u>Anal. Chem.</u> (1997) 69: 3451-3457	
	BY	FAN, Z.H. et al., "Micromachining of Capillary Electrophoresis Injectors and Separators on Glass Chips and Evaluation of Flow at Capillary Intersections," <u>Anal. Chem.</u> (1994) 66: 177-184	
	BZ	FISTER, J.C. III et al., "Counting Single Chromophore Molecules for Ultrasensitive Analysis and Separations on Microchip Devices," <u>Anal. Chem.</u> (1998) 70: 431-437	
	CA	HADD, A.G. et al., "Microfluidic Assays of Acetylcholinesterase," <u>Anal. Chem.</u> (1999) 71: 5206-5212	
	CB	HARRISON, J. et al., "Capillary Electrophoresis and Sample Injection Systems Integrated on a Planar Glass Chip," <u>Anal. Chem.</u> (1992) 64: 1926-1932	
	CC	HARRISON, J. et al., "Towards Miniaturized Electrophoresis and Chemical Analysis Systems on Silicon: An Alternative to Chemical Sensors*," <u>Sensors and Actuators B</u> (1993) 10: 107-116	
	CD	HARRISON, J. et al., "Micromachining a Miniaturized Capillary Electrophoresis-Based Chemical Analysis System on a Chip," <u>Science</u> (1993) 261: 895-897	
	CE	HARRISON, D.J. et al., "Integrated Electrophoresis Systems for Biochemical Analyses," <u>Solid-State Sensor and Actuator Workshop</u> (1994) 21-24	
	CF	JACOBSON, S.C. et al., "Effects of Injection Schemes and Column Geometry on the Performance of Microchip Electrophoresis Devices," <u>Anal. Chem.</u> (1994) 66:1107-1113	
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	CH	JACOBSON, S.C. et al., "Open Channel Electrochromatography on a Microchip," <u>Anal. Chem.</u> (1994) 66: 2369-2373	
	CI	JACOBSON, S.C. et al., "Precolumn Reactions with Electrophoretic Analysis Integrated on a Microchip," <u>Anal. Chem.</u> (1994) 66: 4127-4132	
	CJ	JACOBSON, S.C. et al., "Microchip Electrophoresis with Sample Stacking," <u>Electrophoresis</u> (1995) 16: 481-486	
	CK	JACOBSON, S.C. et al., "Fused Quartz Substrates for Microchip Electrophoresis," <u>Anal. Chem.</u> (1995) 67: 2059-2063	
	CL	JACOBSON, S.C. et al., "Integrated Microdevice for DNA Restriction Fragment Analysis," <u>Anal. Chem.</u> (1996) 68: 720-723	

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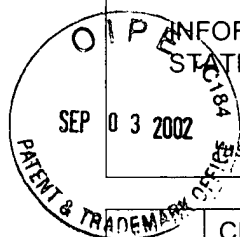
First Named Inventor **Shuck**

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Attorney Docket Number **100/12710**

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CM	JACOBSON, S.C. et al., "Electrokinetic Focusing in Microfabricated Channel Structures," <u>Anal. Chem.</u> (1997) 69: 3212-3217	
CN	JACOBSON, S.C. et al., "Microfluidic Devices for Electrokinetically Driven Parallel and Serial Mixing," <u>Anal. Chem.</u> (1999) 71: 4455-4459	
CO	MANZ, A. et al., "Miniaturized Total Chemical Analysis Systems: a Novel Concept for Chemical Sensing," <u>Sensors and Actuators</u> (1990) B1: 244-248	
CP	MANZ, A. et al., "Micromachining of Monocrystalline Silicon and Glass for Chemical Analysis Systems," <u>Trends in Analytical Chemistry</u> (1991) 10:144-149	
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CR	MANZ, A. et al., "Planar Chips Technology for Miniaturization of Separation Systems: A Developing Perspective in Chemical Monitoring,"	
CS	MANZ, A. et al., "Electroosmotic Pumping and Electrophoretic Separations for Miniaturized Chemical Analysis Systems," <u>J. Micromach. Microeng.</u> (1994) 4: 257-265	
CT	MANZ, A. et al., "Parallel Capillaries for High Throughput in Electrophoretic Separations and Electroosmotic Drug Discovery Systems," <u>International Conference on Solid-State Sensors and Actuators</u> (1997) 915-918	
CU	McCORMICK, R.M. et al., "Microchannel Electrophoretic Separations of DNA in Injection-Molded Plastic Substrates," <u>Anal. Chem.</u> (1997) 69: 2626-2630	
CV	MOORE, A.W. et al., "Microchip Separations of Neutral Species via Micellar Electrokinetic Capillary Chromatography," <u>Anal. Chem.</u> (1995) 67: 4184-4189	
CW	RAMSEY, J.M. et al., "Microfabricated Chemical Measurement Systems," <u>Nature Medicine</u> (1995) 1:1093-1096	
CX	SALIMI-MOOSAVI, H. et al., "Biology Lab-on-a-Chip for Drug Screening," <u>Solid-State Sensor and Actuator Workshop</u> (1998) 350-353	
CY	SEILER, K. et al., "Planar Glass Chips for Capillary Electrophoresis: Repetitive Sample Injection, Quantitation, and Separation Efficiency," <u>Anal. Chem.</u> (1993) 65:1481-1488	
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DA	UEDA, M. et al., "Imaging of a Band for DNA Fragment Migrating in Microchannel on Integrated Microchip," <u>Materials Science and Engineering C</u> (2000) 12:33-36	
DB	WANG, C. et al., "Integration of Immobilized Trypsin Bead Beds for Protein Degestion within a Microfluidic Chip Incorporating Capillary Electrophoresis Separations and an Electrospray Mass Spectrometry Interface," <u>Rapid Commun. Mass Spectrom.</u> (2000) 14:1377-1383	

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SEP 4 2002

DC	WOOLLEY, A.T. et al., "Ultra-High-Speed DNA Fragment Separations Using Microfabricated Capillary Array Electrophoresis Chips," <u>Proc. Natl. Acad. Sci. USA</u> (1994) 91:11348-11352	
DD	WOOLLEY, A.T. et al., "Functional Integration of PCR Amplification and Capillary Electrophoresis in a Microfabricated DNA Analysis Device," <u>Anal. Chem.</u> (1996) 68: 4081-4086	
DE	WOOLLEY, A.T. et al., "High-Speed DNA Genotyping Using Microfabricated Capillary Array Electrophoresis Chips," <u>Anal. Chem.</u> (1997) 69:2181-2186	
DF	WOOLLEY, A.T. et al., "Capillary Electrophoresis Chips with Integrated Electrochemical Detection," <u>Anal. Chem.</u> (1998) 70: 684-688	
DG	ZHANG, B. et al., "Microfabricated Devices for Capillary Electrophoresis-Electrospray Mass Spectrometry," <u>Anal. Chem.</u> (1999) 71:3258-3264	

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